



Broadband Resistors

**R35-2010BB100R0Fx1QG**

**Product Features**

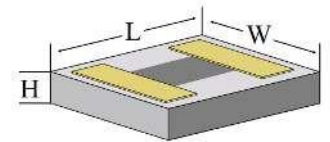
Case Size	Std. Resistance
2010	100Ω

**Mechanical Dimensions**

L = 0.020" ± 0.002" (0.508mm ± 0.051mm)  
 W = 0.010" ± 0.001" (0.254mm ± 0.051mm)  
 H = 0.010" ± 0.001" (0.254mm ± 0.025mm)



Style: 1 Recessed Pad

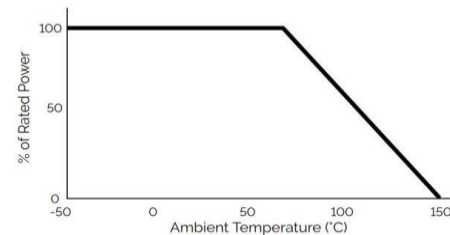


1% standard tolerance (other tolerances available)

**Specifications**

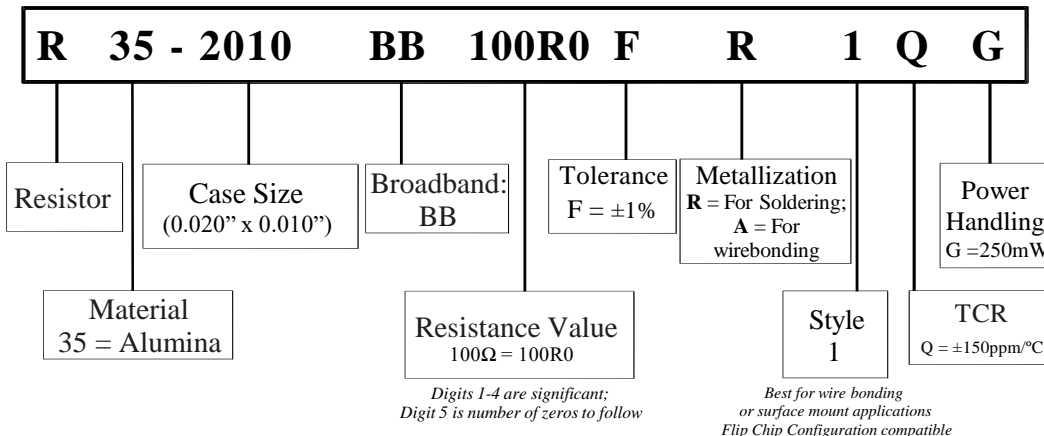
Operating Frequency	DC to 67 GHz
Operating Temperature Range	-55°C to +150°C
Resistive Material	Tantalum Nitride (TaN)
Temperature Coefficient	±150 ppm/°C standard
Resistance Tolerance	±1% standard
Substrate	Alumina (Al <sub>2</sub> O <sub>3</sub> ) other substrates available
Metallization	A = Tantalum/Palladium/Gold (TaN/Pd/Au) R = Titanium/Platinum/Gold (Ti/Pt/Au)
Power Derating <i>See Chart at Right</i>	Full power up to 70°C Derated linearly to zero power at 150°C

Power Derating Curve



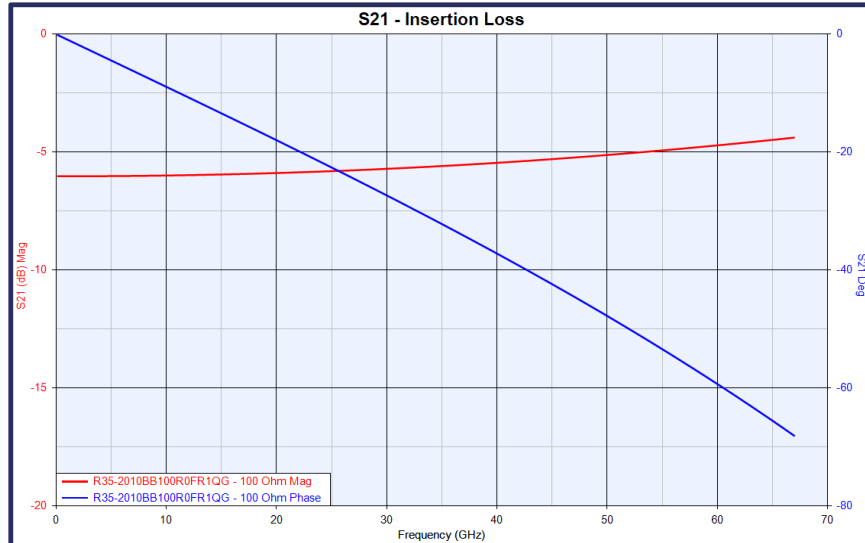
\*All PPI Thin Film parts are Non-Magnetic

**Part Numbering**

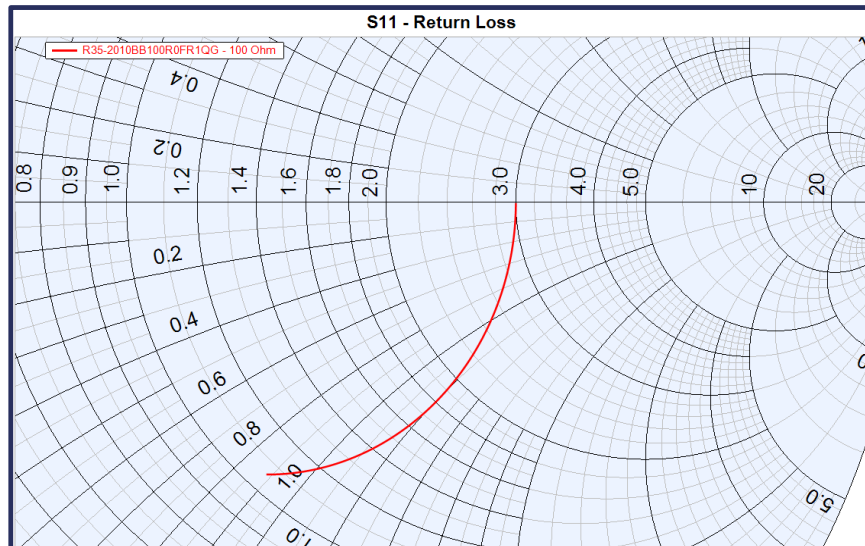


**Performance Curves - Insertion and Return Loss Charts**

20 x 10 100 Ω Insertion Loss



20 x 10 100 Ω Return Loss



**Simulated Test Conditions / Pad Dimensions / Dielectric**

Modelithics calculated data for 50 Ohm and 100 Ohm resistors from 0.1 to 67.0 GHz on 4 mil Rogers 4350B, Dielectric constant = 4.15. The pad dimensions used to develop the datasheet plots were: Length = 4.0 (0.102), Width = 10.0 (0.254), Gap = 13.0 (0.330). Units in mil (mm). Reference planes were at the pad edges.

**Packaging**

Parts are available in Waffle Packs and Tape & Reel. Contact PPI for additional packaging options.